



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/587,245

04/16/2007

Seong-Soo Park

4900-06091733

9705

22429

7590

11/05/2009

LOWE HAUPTMAN HAM & BERNER, LLP
1700 DIAGONAL ROAD
SUITE 300
ALEXANDRIA, VA 22314

EXAMINER

SARWAR, BABAR

ART UNIT

PAPER NUMBER

2617

MAIL DATE

DELIVERY MODE

11/05/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed **10/16/2009** have been fully considered but they are not persuasive.
2. **Claims 1-19** have been rejected.

The applicant argued about the features wherein a handoff scheme is employed to make a handoff decision depending upon whether the link quality of an alternative link is above or below a reference value in connection with the alternative link; a handoff may be performed depending upon the link quality of an alternative network, regardless of that of the primary network; a handoff from a mobile communication network (i.e., the primary link) to a portable Internet network (i.e., the secondary link) is performed if the link quality of the portable Internet calculated at the fifth step is higher than a second reference value, read upon Moon as follows;

Moon's method discloses that in selecting the communication path/link, the quality of various communication links is evaluated. The link quality of existing links is periodically evaluated or determined using the metrics and re-routing/handoff decisions are made. If the link quality is below the high link quality threshold, the alternative communication link is established i.e. the alternative communication link is better than the primary communication link, therefore the alternative communication link quality is monitored and evaluated as well. The handoff is performed based on whether or not the alternative link quality is above the high link quality threshold as disclosed in **Col. 13:14-67, Figs. 4, 5**. Moon further discusses a heterogeneous communication system wherein

Art Unit: 2617

the mobile station being able to communicate with a plurality of wired and wireless communication networks for example IP network (an IP LAN, an IP WAN, or the Internet), WLAN, PSTN, GPRS and cellular networks. Moon discloses a heterogeneous handoff scheme as exhibited in **Figs. 2-5**. Moon's heterogeneous handoff scheme determines potential communication paths/links based on topology; determines appropriate metrics relating to each communication path and selects communication path based on the metrics as discussed in **Fig. 4**. Moon discloses that the link quality of the primary link is monitored, as it goes below the high quality threshold, the alternative link is selected i.e. comparison is performed if the alternative link is better or not. The handoff takes place, and the alternative link quality is monitored and evaluated as well. As the handoff scheme determines that the previous primary link quality has become better or is higher than the high quality link threshold, the alternative link is abandoned and handoff scheme goes back to the previous primary link. Therefore the heterogeneous handoff scheme monitors and determines the optimal paths/links based on the changes that occur in the heterogeneous communication systems as exhibited in various steps in **Figs. 4-5**. Further, Moon discloses that although the link quality of the base station link with first mobile station may be strong, the mobile station may determine the existence of a Bluetooth connection with second mobile station due to the movement of the mobile stations within proximity of one another. Based on a path length metric (or any other appropriate metric or metrics), first mobile station may determine that the call should be routed directly to the second mobile station using the

Art Unit: 2617

Bluetooth link as exhibited in **Col. 15:1-10, Fig. 2**. Thus Moon shows the
aforementioned limitations.

/BABAR SARWAR/

Examiner, Art Unit 2617